

DTCC

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DTC Corporate Actions Redemptions Service Guide

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Important Legal Information

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The contents of the Service Guides are updated in different formats on a periodic basis. Participants and other authorized users of the Service Guides will find the most current version of the Service Guides, as well as DTC Important Notices which address the contents of the Service Guides, at <http://dtcc.com>. You can access the Important Notices at <http://dtcc.com/legal/important-notices.aspx>. DTC shall bear no responsibility for any losses associated with the failure of Participants or other authorized users to follow DTC's most current Service Guides and/or Important Notices.

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ABOUT REDEMPTION SERVICES

Introduction

Overview

This guide describes DTC's redemption processing services which collectively fall under the Redemptions event group in the Corporate Actions product. Each section includes a description of the service and how it works. All Redemption services concerning redemption and maturity processing can be accessed on the Corporate Actions Web browser referred to as "CA Web".

Note: Although DTC makes every effort to provide you with timely information regarding redemption and maturity payments, you are primarily responsible for obtaining such information without reliance on DTC. We recommend that you reconcile your records with DTC's in advance of redemption or maturity payable dates.

About the Redemption Service

DTC's Redemption service includes announcing, collecting, allocating and reporting redemption and maturity payments on behalf of its participants holding DTC-eligible securities serviced by the depository. This centralized processing spares participants the burden of dealing with thousands of paying agents.

DTC employs a harmonized, single-event data model. It includes event/sub event type combinations which differ from the function code model used in the PTS/PBS platforms. As part of the data model, DTC manages a redemption events group lifecycle through one holistic corporate action event identifier (CA ID).

Preparing to Use the Service

In order to use the Redemption services, you must have access to one of the following:

- The Participant Terminal System (PTS)
- The Corporate Actions Web (CA Web)
- Participant Browser Service (PBS)
- ISO 20022 Messages via MQ, NDM/FTP or SWIFT
- CCF (Computer-to-Computer Facility) format files

Note that at the end of Q1 2017, the following PTS/PBS functions will no longer be available for Redemptions activity. They will be replaced with CA Web functionality as indicated.

About Redemption Services: Introduction

PTS Function	PBS Function	CA Web Function Name	CA Web Function Description
SDAR (Dept. R)	Redemption Allocations	Allocations	Allows users to view allocations and entitlements for redemption event types. This is the CA Web equivalent of all screens and web pages that are covered by SDAR (Same Day Allocation Reporting - Dept R)
ADJI	<i>Adjustment Inquiries</i> Cash Adjustments	Adjustments	Allows users to view cash adjustments for redemptions (ADJI - Adjustments Inquiry)
RIPS Cat. B -1,2,3 for Maturities Cat. C -1,2,3 for Redemptions	CUSIP Search	Announcements	General announcement access, allows users to set up individual saved searches - OR - General announcement access; allows user to save searches which can then be used by all users within their firm
Cat. B -1,2,3 for Maturities Cat. C -1,2,3,4 for Redemptions	Maturity and Redemption - Summary, New, Updated, Cancelled (Redemptions only)		
Cat. C - 5 for Redemptions	Lottery Results	Dashboard Entitlements	Allows users to view the results of a DTC lottery affecting their position on Partial Call, Partial Defeasance and Partial Prerefunding events
Cat. C - 7 for Redemptions	Called Certificate	Dashboard	Allows users to view all certificates called as a result of a lottery
Cat. B - 4,5 for Maturities Cat. C - 8,9 for Redemptions	RIPS - Reorg Deposits	Dashboard	Allows users to view entitlements and allocations as result of a reorg deposit and/or custody reorg deposit

DTC offers a comprehensive overview of redemption activity comprised of Announcements, Allocations, Adjustments and applicable alerts via CA Web’s Redemptions dashboard which “pushes” data to users.

Understanding the Redemptions lifecycle and data model are important prerequisites for successful use of the Redemptions service. DTC offers robust training resources available at its Asset Services Learning Center — <https://dtcclearning.com/learning/assetservices/>

Contact your Relationship Manager for more information.

Note: DTC also provides various reports on SMART/Search and the ability to export data from CA Web to spreadsheets, for manipulation and analysis.

REDEMPTIONS

How Redemptions Work

- DTC retrieves information on redemptions and maturities from various sources (see [Information Sources](#))
- DTC distributes information electronically in advance of the redemption or maturity payable date. This helps you reconcile your records with DTC before the payable date. Event information includes but is not limited to:
 - Corporate Action Event ID (CA ID)
 - CUSIP
 - Publication Date
 - Redemption Date
 - Lottery Swing Date
 - Security Rate
 - Cash Rate
- Under the CA ID you will see event level information. Every event has one option and at least one payout. Options indicate what is available as an entitlement to eligible holders. Examples of option types include cash or, securities. A payout should be considered the actual entitlement. Entitlements can include:
 - Principal
 - Interest
 - Securities
 - Premium
 - Make-Whole Premium
- DTC provides its participants with information pertaining to their entitlements through the following delivery mechanisms:
 - Corporate Actions Web
 - Participant Terminal System (PTS) functions
 - Participant Browser Services (PBS)
 - Computer to Computer Facilities (CCF) file transmissions

Redemptions:
Security Types

- ISO 20022 Messaging
- SMART/Search

Security Types

DTC processes redemptions and maturities for security types including but not limited to the following:

- Corporate bonds
- Municipal bonds
- Equities

The following redemption events are covered in the functionality described below:

Event Name	Event Code/Activity Code
Default	AC-86F AC-86P
Final Paydown	AC-89 AC-75F AC-77F
Full Call	AC-75F AC-77F AC-87F
Full Prerefunding	AC-77L AC-77P
Maturity	AC-70 AC-75M AC-77M
Partial Call	AC-74 AC-76
Partial Defeasance	AC-76D
Partial Prerefunding	AC-76P
Termination	AC-87F

Information Sources

DTC receives redemption and maturity information, both electronically and in hard-copy format, from the following:

- Issuers
- Paying Agents
- Fiduciary Communications Company (FCC) file
- IPA – Systemic Upload via Web (similar to FCC uploads)

REDEMPTIONS

About Maturities and Redemptions

Both maturities and redemptions are considered mandatory activities. DTC processes the events without receiving instructions from its Participants.

Participants will not be allocated any redemption proceeds for a position that is pledged (including any contra-CUSIP position that is pledged) until the pledge has been released. A Participant may be allocated the payment for a position that is segregated, but in such cases the Participant's general free position will be caused to go short the equivalent quantity of securities and the Participant will be subject to a short position penalty charge. Participants should arrange for the release of any pledges, segregations or Investment Identifications prior to the anticipated redemption payment date.

DTC will not be liable for claims for interest on late principal payments on maturities or redemptions for which Participants fail to release their pledges or segregations prior to maturity or redemption date.

Nothing contained in any information provided by DTC shall relieve Participants of their responsibility under DTC's Rules and Procedures to check the accuracy of their Participant Daily Activity Statements and to notify DTC of any discrepancies.

If you are aware of a maturity of an issue on which you have not received notification from DTC via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging or SMART/Search you should notify DTC's Customer Service hotline at 1 888 382 2721.

If you are aware of a full call or partial call on an issue on which you have not received notification from DTC via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging or SMART/Search, you should notify DTC's Customer Service hotline at 1 888 382 2721.

About Maturities

Prior to the maturity date for a debt security, The Depository Trust Company (DTC) presents a letter of transmittal certificates to the redemption agent for payment. On maturity date or the next business day if the maturity date falls on a weekend or holiday, DTC collects redemption proceeds from the agent, allocates the proceeds to DTC Participants having position in the security issue and deletes the Participants' positions from DTC's records.

Allocations are reported via the following: CA Web, ISO 20022, PTS/PBS (SDAR), CCF file formats and SMART/Search reports.

Participants are responsible for determining that their maturing DTC-eligible security positions have been properly identified and processed by DTC by reviewing their own records (including their customer's holdings) of maturing issues and their own security descriptions for DTC-eligible issues. Participants should use their own security descriptions

which provide an independent check for key financial elements for each security, including the interest rate and maturity date.

Information regarding DTC's processing of maturities is generally available via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

Information on a maturity is derived from DTC's security master file, which is coded at the time the issue is made DTC-eligible. DTC will not be liable for claims for interest on missed or late principal payments on maturities which Participants fail to bring to DTC's attention within one month.

About Redemptions

Unlike maturities, most redemptions (full calls or partial calls) are not known at issuance. Thus, the first step in processing a redemption is discovering its existence. Once DTC verifies an upcoming redemption, DTC presents a letter of transmittal or electronic file of expected payments due to the redemption agent for payment.

In the event of a partial call, DTC will process a computerized call lottery to determine the Participants' individual holdings to be included in the call. On redemption date or the next business day if the redemption date falls on a weekend or holiday, DTC collects redemption proceeds from the agent, allocates the proceeds to DTC Participants having position in the redeemed portion of the issue and deletes such Participants' position from DTC's records. Allocations are reported on the Participants' Dividend/Reorganization Cash Settlement Listing on the day they are made. Note that DTC will not allocate on the redemption date unless it has received the funds identified at a CUSIP level from the agent by 3:00 p.m. ET.

Some full and partial call notices contain language stating that the payment of the redemption proceeds is conditioned upon some event. DTC only allocates redemption proceeds to Participants upon receipt of funds from the redemption agent.

Information regarding DTC's processing of Redemptions is generally available via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

The information provided on these functions is derived from sources DTC believes to be reliable, but DTC does not represent the accuracy, adequacy, timeliness, completeness, or fitness for any particular purpose of this information, which is provided as is. Further, this information may be subject to change. Participants should obtain, monitor and review independently any available documentation relating to the redemption and should verify independently information obtained from DTC.

DTC will not be liable for claims for interest on missed or late principal payments on redemptions for which DTC received no notice or late notice. DTC will, however, initiate compensation claims against paying agents whenever appropriate and will pass on to Participants through DTC's redemption refunds any amounts received on such claims.

The information provided on these functions is derived from sources DTC believes to be reliable, but DTC does not represent the accuracy, adequacy, timeliness, completeness, or

Redemptions: About Maturities and Redemptions

fitness for any particular purpose of this information, which is provided as is. Further, this information may be subject to change. Participants should obtain, monitor and review independently any available documentation relating to the redemption and should verify independently information obtained from DTC.

DTC will not be liable for claims for interest on missed or late principal payments on redemptions for which DTC received no notice or late notice. DTC will, however, initiate compensation claims against paying agents whenever appropriate and will pass on to Participants through DTC's redemption refunds any amounts received on such claims.

DTC will not process early redemptions on Certificates of Deposit (CDs) unless: (i) there is a provision in the master certificate that permits early termination by the issuer and specifies the payment to be made in connection therewith or (ii) written consent to an early redemption, in a form designed by DTC, is obtained by the issuer from all of the holders of the CD. In the event that an issuer sends an early payment to DTC, in contravention of the above, DTC will return the payment to the issuer less any costs associated with facilitating the attempted redemption and return of funds.

MATURITIES

In contrast to when certificates are partially or fully called, when they mature, DTC can track them and act in advance. DTC announces upcoming maturities approximately 30 business days (45 calendar days) in advance of maturity date via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search

Track all upcoming maturities via your own security master file.

Check for upcoming maturities via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

DTC chills all deposit and withdrawal activity on maturing issues 30 business days prior to maturity date. DTC chills certain book-entry activities (Pledges, Segregations) two business days prior to maturity date and chills Deliver Orders one business day prior to maturity date.

Maturity proceeds are allocated to DTC Participants having position in the maturing issue as of the close of business on the day prior to maturity date.

On or prior to the Payment Date: Participants must release or substitute securities used as collateral on any outstanding loan. Failure to do so will cause a delay in the receipt of expected entitlements. DTC does not allocate entitlements on securities pledged for collateral.

Participants must release any Segregated or Investment Identification (ID) positions. Failure to do so will result in a short position in the Participant's Regular Unpledged account. Participants will receive their entitlements upon DTC's receipt of properly identified funds from the paying agent. Once the Segregated or Investment Identification (ID) positions are released the Regular Unpledged account will be adjusted accordingly.

Prior to the maturity date, DTC presents the letter of instructions to the redemption agent for payment.

On or prior to payment/maturity date DTC verifies with the agent that maturity proceeds will be paid. DTC adjusts Participants' positions and allocates proceeds to Participants only after receipt of the proceeds from the agent. Allocations are reported on the Allocations functionality on CA Web, ISO 20022 Entitlement and Allocation messages, CCF files, SMART/Search reports and Settlement Statement Reports (Activity Code 88) found on Settlement Web/PTS or PBS.

Note: For processing options on maturities of foreign currency denominated issues, refer to the section on [Foreign Currency Denominated Issues](#).

FULL REDEMPTIONS

An issuer of a security may be allowed under the terms of the issue to call the issue for redemption in full at certain times during the issue's life. In such case, the issue's trustee is required to publish notice of such event or in the case of registered securities mail notice of such event to the registered holders. Once DTC verifies the existence of a full call it notifies Participants of the call via the CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search, and initiates full call processing.

Note: All full calls on convertible issues are processed by DTC and announced to Participants via reorganization activity codes purposed to handle the ongoing conversion and redemption of the convertible security. Such issues are treated as conversion expirations at which point a conversion expiration activity is announced and Participants wishing to convert their called securities into cash, securities or a combination of both must do so by the conversion expiration date. This information can be found on CA Web, PTS/PBS (RIPS), CCF files, ISO 20022 messages and SMART/Search reports.

Notify DTC of any full redemption you are aware of but have not received notification from DTC via the CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search by contacting the Customer Service hotline at 1 888 382 2721.

DTC chills all deposit and withdrawal activity on fully-called issues upon receipt of the call notice. DTC chills certain book-entry activities (Pledges, Segregations) two business days prior to the redemption date and chills Deliver Orders one business day prior to redemption date.

Redemption proceeds are allocated to DTC Participants having position in the issue being redeemed as of the close of business on the day prior to redemption date.

On or prior to the Payment Date:

Participants must release or substitute securities used as collateral on any outstanding loan. Failure to do so will cause a delay in the receipt of expected entitlements. DTC does not allocate entitlements on securities pledged for collateral.

Participants must release any Segregated or Investment Identification (ID) positions. Failure to do so will result in a short position in the Participant's Regular Unpledged account. Participants will receive their entitlements upon DTC's receipt of properly identified funds from the paying agent. Once the Segregated or Investment Identification (ID) positions are released the Regular Unpledged account will be adjusted accordingly.

On or prior to payment/redemption date DTC verifies with the agent that redemption proceeds will be paid. DTC adjusts Participants' positions and allocates proceeds to Participants only after receipt of the proceeds from the agent. Allocations are reported on the Allocations functionality on CA Web, ISO 20022 Entitlement and Allocation messages, CCF files, SMART/Search reports and Settlement Statement Reports (Activity Code 88) found on Settlement Web/PTS or PBS.

Full Redemptions:
About Maturities and Redemptions

Note: Full redemption proceeds are allocated to DTC Participants having position in the fully-called issue as of the close of business on the day prior to redemption date.

PARTIAL CALLS

An issuer of a security may be allowed under the terms of the issue to call part of the issue outstanding for redemption at certain times during the issue's life. In such a case, the issue's trustee is required to publish notice of such event or in the case of registered securities mail notice of such event to the registered holders.

When DTC receives notice of a partial call it creates an announcement in its Redemption processing system prior to processing the call lottery. This preliminary call notice information is made available immediately to Participants via the following mediums: CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

In addition, after the call lottery is processed by DTC, the announcement information is updated and is available via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search. This aforementioned functionality also indicates to the Participant whether or not they had a position in the called security in their DTC account as of the close of business the day prior to the publication date of the call. Any updates to the announcement such as changes in the payment rate will be available for review by Participants via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

The Call Lottery

DTC will:

- Capture position as of the close of business the evening prior to the publications date. The captured position will be subject to the call.
- Perform pre-lottery procedures to determine the total amount of DTC called securities
- Determine the total amount of called bonds or the number of preferred shares.
- Provide Participants with access to lottery results via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search

In general, DTC allocates total called positions to Participants' Called Securities With Interest and Called Securities Without Interest accounts. For some types of partial calls, however, DTC does not segregate Participants' called positions into these accounts. In these instances, the called positions are instead segregated within Participants' General Free account but under a contra CUSIP number assigned to the issue at the time of the call lottery. The contra CUSIP number assigned to a particular partial call is announced to Participants via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

Types of partial calls that use a contra CUSIP number:

- Concurrent Full and Partial Calls

In the event that both a partial and full call are announced on an issue for the same redemption date, the partial call is processed and then full call processing occurs on the remaining positions.

In certain circumstances, DTCC may process such events via a contra CUSIP number.

- Convertible Issues

All partial calls on convertible issues are processed via contra CUSIP numbers. Called positions segregated under the contra CUSIP number are treated as an expiring conversion. A conversion expiration event is announced on the contra CUSIP via the CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search and Participants wishing to convert their called securities into the underlying security must do so by the conversion expiration date.

- Foreign Currency Denominated Issues

In the event of a partial call on a foreign currency denominated issue, DTC runs a call lottery using a contra CUSIP number. This permits Participants to submit instructions electing to receive payment proceeds (outside of DTC) in the foreign currency, if they wish to do so.

- Other Activities

In the event that a portion of an issue becomes the target of a voluntary activity (e.g., partial mandatory tender with retainment option), DTC runs a call lottery using a contra CUSIP number. DTC then sets up the voluntary event with the contra CUSIP number as the target security. Thus, only positions selected in the lottery are eligible for the voluntary event.

To execute the impartial call lottery process, DTC:

- Conducts an impartial lottery based on Participants' positions as of the close of business the day prior to the publication date.

In 1975, DTC issued a description of the impartial lottery method used to allocate called positions. That method was reviewed and found satisfactory by the New York Stock Exchange. Copies of the New York Stock Exchange memoranda and the lottery method description appear in the Appendix. DTC currently uses this method, with slight procedural modifications, to allocate called positions.

- Allocates the total called positions to the Called Securities With Interest and Called Securities Without Interests accounts (or to the appropriate contra CUSIP number, as required).

Lottery Results

Upon performing its call lottery, DTC immediately broadcasts the results to the Participants via the CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

The Security Position Inquiry Function of Settlement Web and the (POS) function of PTS/PBS contains two additional security fields for called securities, one security field for Called Securities With Interest (i.e., Participant is due accrued interest) and the other for Called Securities Without Interest.

Note: DTC accepts PTS Participants' deposits of municipal securities with distinctions in purpose (that is, the purpose for which the proceeds of the original issuance were used) or series. These distinctions are generally not recognized in the assignment of CUSIP numbers, with the same CUSIP number designating securities which may have different purposes or series (although they are identical in all other details).

Securities deposited by Participants become part of DTC's overall inventory of certificates in the issue, and no distinction is made as to the purpose or series a particular Participant holds. Thus, if an issuer announces a partial or full call of bonds of a particular purpose or series, DTC will process a partial call against all Participant positions recorded under the CUSIP number assigned to that issue. It is possible that a Participant who had previously deposited securities of one purpose or series may have all or part of its position selected in DTC's call lottery even if the call applies to securities of a different purpose or series.

In allocating the results of a partial call by means of a lottery, DTC uses all positions maintained by a Participant, whether the position is a general free position, a pledged position, an investment position or a segregated position. The call lottery system has been designed, however, so that the amount of called securities allocated to a given Participant is deducted only from the Participant's position in its General Free account, even though this deduction may drive the Participant's General Free account short. For example, if a Participant which is long 10 bonds in its general free account and 90 bonds in its pledged account is allocated 20 bonds in a call lottery, the 20 allocated called bonds are deducted from its general free position, leaving it short 10 uncalled bonds in its general free position, long 90 uncalled bonds in its pledged position, and long 20 called bonds in its called with/without interest account. The Participant will be subject to DTC's standard penalty charge on any short position in the General Free account resulting from call lottery allocations; these charges can be easily averted, however, by arranging for a prompt release of the pledged securities for an equivalent amount of called securities.

The allocation of call lottery results exclusively against a Participant's general free account eliminates delays in Participants receiving credit for call redemptions due to a failure to release pledges of positions and simplifies Participants reconciliation of call lottery results. It also encourages Participants to release pledges or segregation of securities which are the subject of partial calls on a timely basis.

Certificates held outside DTC in Cede & Co.'s name, in Street name or in any other name, including any certificates represented by short positions in DTC Participants' accounts, may be called by the Transfer Agent/Trustee. The called amounts of such certificates are not included in DTC's lottery. Control and redemption of such certificates are the responsibility of the Participants.

All changes in positions from the General Free account to the called with/without interest accounts are effective on the day the lottery is run and appear on the Dividend/Reorganization Participant Statement, CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging, SMART/Search and Settlement Web.

The Participant can combine the result of the DTC lottery with any called amount of the same issue held by the Participant outside DTC. The Participant conducts an impartial lottery to allocate called amounts to accounts for which the securities are being held, in accordance with any applicable regulations.

Note:

1. On and after publication date, called certificates and DTC book-entry transfers of called security positions are not a good delivery except when an entire issue is called or when the transaction is specifically in called securities
2. Participants can use DTC's Short Position Reclamation Procedure to recall book-entry deliveries of callable securities made between the call publication date and the DTC call lottery date. (Any short positions created before this date are excluded from this procedure.)
3. Contact the pledgee to arrange release or substitution prior to redemption date where a called amount has been allocated to pledged securities by DTC's lottery system.
4. Release securities from Investment Identification and Segregated status, where a call has been allocated by DTC's lottery system. Called securities in Investment Identification and Segregated status on redemption date will be redeemed together with all other called securities.

Lottery Cancellations/ Reversals

When DTC receives a notice of lottery cancellation, Participants are notified via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search. DTC will reverse the call by reinstating Participants' positions and reversing the funds allocation (if funds have been allocated).

Supplemental Lotteries

Upon receipt of revised instructions to call an additional amount of securities in reference to a redemption which has been completed, DTC will process a supplemental lottery to comply with these instructions. The supplemental lottery is run identically to an original partial call

lottery except that any position already hit in the original lottery is not included in the supplemental lottery (e.g., if the Participant's publication date position is 100 bonds and 40 bonds are called in the original lottery, the Participant's publication date position for purposes of the supplemental lottery will be adjusted to 60 bonds [100 minus 40]).

Partial Calls of Uniquely Denominated Securities

A uniquely denominated security has authorized certificate or trading denominations that are not an integral multiple of its minimum denomination. For example, a uniquely denominated security might have a \$100,000 base denomination and integral multiples of \$5,000 thereof.

Although DTC makes every effort to ensure that holders will continue to hold at least the base denominations and multiples thereof after the lottery has been run, there are instances where DTC must adjust the called amounts prior to affecting DTC's books and records, DTC's procedures for processing partial calls on such issues recognize four possible scenarios. Under all four scenarios, DTC rounds the called quantity and all Participants' positions to the nearer even amount (that is, to an amount that is an integral multiple of the issue's minimum, base denomination) for the purpose of running a first lottery. The four scenarios are then the following:

Scenario #1:

No adjustments are needed after running the first lottery because the amount called is an even amount and no Participant's remaining uncalled position is less than the issue's base denomination.

DTC rounds Participants' unique positions up or down to the nearer even amount so that all Participant positions are even amounts for the purpose of the first lottery, and runs the first lottery. The denomination for the first lottery is the base denomination of the issue.

Scenario #2:

Adjustments are needed after running the first lottery because the amount called is not an even amount and/or one or more Participants' remaining uncalled position is less than the issue's base denomination. The sum of the adjustments is zero.

DTC rounds the called quantity and Participants' unique positions up or down to the nearer even amount so that all amounts are even amounts for the purpose of the first lottery, and runs the first lottery. The denomination for the first lottery is the base denomination of the issue.

If any Participant's remaining uncalled position after the first lottery is less than the base denomination of the issue and not equal to zero, DTC adjusts each such position as follows:

- A.** If the remaining uncalled position is less than 50% of the issue's base denomination, or negative, DTC calls the position in full.
- B.** If the remaining uncalled position is equal to or greater than 50% of the issue's base denomination, and the original position was greater than the issue's base denomination, DTC

restores the original position up to the issue's base denomination and the Participant is not affected by the lottery.

C. If the remaining uncalled position is equal to or greater than 50% of the issue's base denomination, and the original position held was already less than the issue's base denomination, DTC does not adjust the remaining uncalled position since it is already equal to the original position.

D. Adjusting for any overall called amount to be allocated or unwound.

DTC sums up the adjustments made in A, B, and D. A zero answer means the adjustments offset one another, and the lottery is completed.

Scenario #3:

Adjustments are needed after running the first lottery because the amount called is not an even amount and/or one or more Participants' remaining uncalled position is less than the issue's base denomination. The sum of the adjustments is a positive amount.

DTC rounds the called quantity and Participants' unique positions up or down or to the nearer even amount so that the denomination for this lottery is the base denomination of the issue.

A. Allocate as much as possible of any remaining even amount to be called (including any remaining even portion of a unique amount to be called) to the remaining uncalled positions of Participants whose original positions were even amounts. The purpose is to avoid driving other Participants' remaining uncalled positions below the issue's minimum, base denomination. DTC excludes from this lottery the remaining uncalled positions of Participants whose positions are unique amounts.

The denomination for this lottery is the base denomination of the issue.

B. Allocate as much as possible of any remaining amount to be called to the remaining uncalled positions of Participants whose original positions were already below the issue's minimum, base denomination. The purpose is to avoid driving other Participants' remaining uncalled positions below the issue's minimum, base denomination or converting them into unique amounts. DTC excludes from this lottery all other Participants' remaining uncalled positions.

The denomination for this lottery is the incremental denomination above the base denomination of the issue.

C. Allocate as much as possible of any remaining amount to be called to the remaining uncalled positions above the issue's base denomination of Participants whose original positions were unique amounts. The purpose is to avoid driving any Participant's remaining uncalled position below the issue's minimum, base denomination or converting other Participants' even positions into unique amounts. DTC excludes from this lottery the base denomination portion of the remaining uncalled positions of Participants whose original positions were unique amounts, and the entire remaining uncalled positions of Participants whose original positions were even amounts.

The denomination for this lottery is the incremental denomination above the base denomination of the issue.

D. Allocate as much as possible of any remaining amount to be called to the remaining uncalled positions above the issue's base denomination of Participants whose original positions were even amounts. The purpose is to avoid driving any Participant's remaining uncalled position below the issue's minimum, base denomination, but at this point at least one Participant's even position will be converted into a unique amount.

If at least one Participant's remaining uncalled position above the issue's base denomination is equal to or greater than the remaining amount to be called, DTC inputs the remaining amount to be called for the lottery denomination as though it were the issue's base denomination so that one Participant will be hit in the lottery for the entire remaining amount to be called. The purpose is to minimize converting Participant's even positions into unique amounts. If all Participants' remaining uncalled positions above the issue's base denomination are less than the remaining amount to be called, the denomination for this lottery is the incremental denomination above the base denomination of the issue.

E. Allocate any remaining amount to be called to the remaining uncalled positions. At this point, at least one Participant's remaining uncalled position after the allocation will be below the issue's minimum, base denomination. DTC will not exclude from this lottery any remaining uncalled positions.

If at least one Participant's remaining uncalled position is equal to or greater than the remaining amount to be called, DTC inputs the remaining amount to be called for the lottery denomination as though it were the issue's base denomination so that one Participant will be hit in the lottery for the entire remaining amount to be called. The purpose is to minimize driving Participants' positions below the issue's minimum, base denomination. If all Participants' remaining uncalled positions are less than the remaining amount to be called, the denomination for this lottery is the incremental denomination above the base denomination of the issue.

Scenario #4:

Adjustments are needed after running the first lottery because the amount called is not an even amount and/or one or more Participants' remaining uncalled position is less than the issue's base denomination. The sum of the adjustments is a negative amount.

DTC rounds the called quantity and Participants' unique positions up or down to the nearer even amount so that all amounts are even amounts for the purpose of the first lottery, and runs the first lottery. The denomination for the first lottery is the base denomination of the issue.

If any Participant's remaining uncalled position after the first lottery is less than the base denomination of the issue and not equal to zero, DTC adjusts each such position as follows:

A. If the remaining uncalled position is less than 50% of the issue's base denomination, or negative, DTC clears the position to zero (calls it).

B. If the remaining uncalled position is equal to or greater than 50% of the issue's base denomination, and the original position held was greater than the issue's base denomination, DTC restores (uncalls) the original position up to the base denomination.

C. If the remaining uncalled position is equal to or greater than 50% of the issue's base denomination, and the original position held was already less than the issue's base denomination, DTC does not adjust the remaining uncalled position since it is already equal to the original position.

D. Adjust for any overall called amount to be allocated or unwound.

DTC sums up the adjustments made in A, B, and D. A negative answer means an amount greater than the called quantity has been allocated to Participants' positions.

DTC runs additional lotteries to unwind the excess amount called as follows:

A. Allocate as much as possible of any even amount to be unwound (including any even portion of a unique amount to be unwound) to the even portions of the remaining called positions of Participants whose positions were adjusted down or up to zero previously. The purpose is to first unwind in even amounts among Participants whose positions were cleared (called) by the previous adjustments, without creating the need for further adjustments. DTC excludes from this lottery the unique portions of the remaining called positions, and the entire remaining called positions of Participants whose positions were not adjusted down or up to zero previously.

The denomination for this lottery is the base denomination of the issue.

B. Allocate as much as possible of any remaining even amount to be unwound (including any remaining even portion of a unique amount to be unwound) to the even portions of the remaining called positions of the Participants whose positions were not adjusted down or up to zero previously. The purpose is to unwind in even amounts among these Participants, without creating the need for further adjustments or converting Participants' even uncalled positions into unique amounts. DTC excludes from this lottery the unique portions of the remaining called positions.

The denomination for this lottery is the base denomination of the issue.

C. Allocate as much as possible of any remaining amount to be unwound to the remaining called positions of Participants whose original positions were unique amounts and remaining uncalled positions are not equal to zero. The purpose is to avoid converting Participant's even uncalled positions into unique amounts or driving Participants' uncalled positions below the issue's minimum, base denomination. DTC excludes from this lottery the remaining called positions of Participants whose original positions were even amounts or remaining uncalled positions are equal to zero.

The denomination for this lottery is the incremental denomination above the base denomination of the issue.

D. Allocate as much as possible of any remaining amount to be unwound to the remaining called positions of Participants whose original positions were even amounts and remaining

Partial Calls: Partial Calls of Odd-Lot Denominated Securities (Baby Bonds)

uncalled positions are not equal to zero. The purpose is to avoid driving Participants' uncalled positions below the issue's minimum, base denomination, but at this point at least one Participant's even uncalled position will be converted into a unique amount. DTC excludes from this lottery the remaining called positions of Participants whose remaining uncalled positions are equal to zero.

If at least one Participant's remaining called position is equal to or greater than the remaining amount to be unwound, DTC inputs the remaining amount to be unwound for the lottery denomination as though it were the issue's base denomination so that one Participant will be hit in the lottery for the entire remaining amount to be unwound. The purpose is to minimize converting Participants' even uncalled positions into unique amounts. If all Participants' remaining called positions are less than the remaining amount to be unwound, the denomination for this lottery is the incremental denomination above the base denomination of the issue.

E. Allocate any remaining amount to be unwound to the remaining called positions. At this point, at least one Participant's remaining uncalled position after the allocation will be below the issue's minimum, base denomination. DTC does not exclude from this lottery any remaining called positions.

If at least one Participant's remaining called position is equal to or greater than the remaining amount to be unwound, DTC inputs the remaining amount to be unwound for the lottery denomination as though it were the issue's base denomination so that one Participant will be hit in the lottery for the entire remaining amount to be unwound. The purpose is to minimize driving Participants' remaining uncalled positions below the issue's minimum, base denomination. If all Participants' remaining called positions are less than the remaining amount to be unwound, the denomination for this lottery is the incremental denomination above the base denomination of the issue.

The procedure fairly and equitably allocates partial calls among Participants while avoiding or at least minimizing, first, the driving of Participants' positions below the issue's minimum, base denomination and, second, the converting of Participants' even positions (integral multiples of the issue's base denomination) into unique amounts (authorized amounts, though not integral multiples of the issue's base denomination).

Partial Calls of Odd-Lot Denominated Securities (Baby Bonds)

An odd-lot denominated security has authorized certificate or trading denominations that are less than \$1,000 principal amount. Such securities, commonly known as baby bonds, may have denominations of \$500, \$100 or other small value.

DTC's procedures for processing partial calls on odd-lot denominated issues are consistent with those described previously for uniquely denominated securities. In all cases, DTC initially runs a lottery using the issue's standard denomination (typically \$1,000 principal amount). In cases where an unallocated called position remains after this initial lottery, DTC will allocate that position using the special procedures described previously ("scenarios" #2 through #4).

OTHER REDEMPTION SERVICES

Full Pre-Refundings

The issuer has deposited in escrow sufficient funds to pay all of the bonds on a scheduled redemption date in advance of the original maturity date.

Generally, DTC is notified of full pre-refundings more than 60 days prior to the pre-refunded redemption date. In some cases DTC is notified less than 60 days prior and possibly even years in advance:

- DTC changes the maturity date of the issue to the pre-refunded redemption date on its security master file. In addition, a less-than sign (<) is placed in the seventh character of DTC's 20-character security description for the issue. Maturity processing is then invoked on such issues identically to other maturing issues.

DTC is notified of full pre-refunding 60 days or less prior to the pre-refunded redemption date:

- DTC processes these issues identically to full calls.

Note: In some cases an issue may be fully pre-refunded but to several redemption dates rather than one. In such cases DTC first processes the issue similarly to a partial call by running lotteries to determine which positions will be swung to each new redemption date. Positions selected for a new date are assigned a new CUSIP number with a maturity date set to the pre-refunded redemption date.

Partial Pre-Refundings

The issuer is refunding only a portion of the issue to an earlier maturity date. Funds are put into escrow to pay at this earlier date.

DTC processes these issues identically to a partial call and then swings the Participants' positions (resulting from the lottery) to the new refunded CUSIP number with its maturity date set to the pre-refunded redemption date. The remainder of the issue is swung from the original CUSIP number to a new non-refunded CUSIP number having the same maturity date as the original. The original CUSIP number is no longer eligible for DTC services.

Note: In some cases, the portion of the issue that is being pre-refunded is being refunded to several different redemption dates. In these cases DTC will run multiple lotteries to allocate positions to each of the pre-refunded redemption dates, with each differentiated by CUSIP number.

Full Defeasances

The issuer has deposited in escrow sufficient funds to pay all of the bonds as they come due.

DTC provides information on defeasances to Participants via CA Web, PTS/PBS, CCF file transmissions, ISO 20022 messaging and SMART/Search.

Partial Defeasances

The issuer has deposited in escrow sufficient funds to pay only a portion of the bonds as they come due.

DTC processes the partial defeasance identically to a partial pre-refunding, except that the maturity date of the defeased portion of the issue does not change.

Reorg Deposit Service

DTC's Reorg Deposits Service allows DTC Participants to deposit any DTC-eligible securities currently undergoing, or have undergone, redemptions and maturity processing. DTC will credit the deposited securities to Participants' accounts and will submit them to the paying agent for payment. DTC will then credit redemption proceeds (or new securities to Participants' securities accounts) to Participants' settlement accounts and delete their positions in the deposited security.

Any DTC-eligible security undergoing call or maturity processing plus any DTC-eligible security that has matured or been called after August 1, 1993 is eligible for the Reorg Deposits Service. Beginning August 1, 1995, deposits of past due issues will only be accepted on issues that have matured or been called during the period up to two years prior to that date of deposit.

For deposits made by Participants beginning on the day DTC's regular deposit procedures are terminated (DTC terminates regular deposit services 30 business days prior to maturity date or upon receipt of a full call notice) and ending on the cutoff date (10 business days prior to the redemption/maturity date), DTC will allocate redemption proceeds to Participants on the day it allocates such proceeds to Participants for positions deposited prior to regular deposit procedure termination (generally the redemption date of the issue).

For deposits made after the cutoff date, DTC will allocate redemption proceeds to Participants upon receipt of funds from the paying agent.

Accrued Interest/Dividend Due on Maturity or Redemption Date

Payments of interest and dividends made on regular interest or dividend payment dates ("on-cycle" payments made to holders as of the record date) for an issue are treated as Distribution events and are paid separately from the Redemption event. Payments of interest or dividends made on a redemption date that is not a regular interest or dividend payment date ("off-cycle" payments) represent interest or dividends that have accrued since the previous interest or dividend payment date and are to be paid to presenting holders. These payments are combined with the principal payment allocated to Participants on redemption date. The rate of such payments is included with other information regarding the maturity or redemption on CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

SPECIAL PROCESSING SCENARIOS

Initial and Interim Distributions on Defaulted Issues Distributions Requiring Certificate Presentation

From time to time, DTC may receive and allocate a distribution of monies due on a defaulted issue to Participants. In cases where certificates must be presented in connection with an initial distribution, information regarding the distribution is made available via CA Web, PTS/PBS (RIPS), CCF file transmissions and ISO 20022 messaging.

In the case of an interim distribution on such issues (that is, where additional distributions are expected to be made), DTC will continue to report each Participant's position in the defaulted issue under the original CUSIP number for the issue. Positions will be deleted when a final distribution on the security is made.

If no presentation of certificates is required (that is, the distribution is paid to holders as of a particular record date), the distribution is paid as a Distribution event by DTC.

Final Distribution on Defaulted Issues Requiring Certificate Presentation

DTC processes these issues identically to full calls.

Final Principal Distribution on Asset-Backed Securities

An example of this would be Collateralized Mortgage Obligations. DTC processes these issues identically to full calls.

Foreign Currency Denominated Issues

DTC receives payments on foreign currency denominated issues only in U.S. Dollars. Participants wishing to receive maturity or call proceeds on these issues in U.S. Dollars need not take any action. DTC will allocate such payments to Participants on payment date. The U.S. Dollar payment rate is normally available on the second business day prior to the payment date and is available via CA Web, PTS/PBS (RIPS), CCF file transmissions, ISO 20022 messaging and SMART/Search.

With the agreement of the redemption agent for the issue, DTC will make an issue eligible for the Redemptions Foreign Currency (RCUR) function of PTS. For such issues, a Participant wishing to receive maturity or call proceeds in the foreign currency may elect to do so by

submitting an instruction on the RCUR function. A Participant who has submitted an election instruction on the RCUR function will receive the foreign currency proceeds on the position that is the subject of the instruction directly from the agent for the issue outside of DTC; DTC will have no payment obligation to the Participant relating to the position that is the subject of the processed RCUR instruction.

In the event of a partial call on a foreign currency denominated issue, Participants' called positions will be recorded under a contra CUSIP number. This contra CUSIP number will be made eligible for submission of election instructions on the RCUR function.

If the redemption agent for the issue does not agree to have the issue eligible on the RCUR function, Participants wishing to receive maturity or call proceeds in the foreign currency must withdraw their certificates from DTC and present them directly with their foreign currency elections prior to the issue's cutoff date for such election. Book-entry-only issues can be withdrawn prior to record date.

DTC uses its best efforts to identify foreign currency denominated issues and to notify Participants of these. Participants aware of foreign currency denominated issues on which they have not received notification from DTC are urged to notify DTC's Customer Service hotline at 1 888 382 2721.

Called Certificates Withdrawn by Certificate-on-Demand (COD) after Publication Date

In the event that a called certificate is withdrawn by COD, or a deposit reject is inadvertently processed, DTC makes an effort to contact the Participant in question and requests the return of the called certificate which was included in DTC's total lottery quantity. If in a reasonable period of time, the Participant cannot return the certificate to DTC, DTC charges the Participant's account the corresponding funds and reinstates its position for the appropriate quantity, upon DTC's allocation of the redemption proceeds.

Recall of Delivery

Participants whose accounts have been driven short because of a call lottery can use DTC's Short Position Reclamation Procedure to recall book-entry deliveries of callable securities made between the call publication date and the DTC call lottery date. (Any short positions created before this date are excluded from this procedure.)

REDEMPTION REFUNDS

The overwhelming majority of redemption proceeds are allocated by DTC to Participants on payable date. In the event that DTC does not pay Participants' redemption proceeds on redemption date, Participants may be entitled to a refund.

A redemption refund is caused by two types of events, both of which involve late allocations of redemption proceeds by DTC to Participants:

- receipt of funds by DTC on payable date, followed by allocation of funds by DTC to Participants after payable date,

OR

- receipt of funds by DTC and allocation of funds by DTC to Participants after payable date.

The first type of event results in a refund to Participants of their pro-rata share of DTC's investment earnings. The second type of event does not generate a refund of investment earnings; rather, it results in DTC submitting compensation claims to redemption agents. Participants receive their pro-rata share of the total amount received on DTC's claim.

Redemption refunds are paid to Participants monthly via credits to their monthly DTC bill.

Supporting schedules listing details of items included in each refund are attached to Participants' monthly bill.

Charge-Backs and Adjustments

Overview

Charge-backs and Adjustments are an important part of redemption allocations. It is necessary for you to understand how DTC processes charge-backs and adjustments to your DTC account (s).

About Charge-Backs and Adjustments

DTC does not credit you redemption proceeds until it is funded by the issuer/agent. Occasionally, it is determined that the proceeds credited were incorrect. In this event, DTC may, in accordance with established procedures, charge your account for the amount of the improper credit and adjust your position accordingly.

Also, from time to time DTC may determine that a payment received by you or your customer directly from the paying agent was rightfully due to DTC. In this event, DTC may, in accordance with established procedures, charge your account for the amount of the improper payment and adjust your position accordingly.

Redemption Refunds: Charge-Backs and Adjustments

In addition, from time to time DTC may determine that you have received insufficient payment. In this event, DTC may, in accordance with established procedures, credit your account.

These adjustments will appear on CA Web, PTS/PBS (ADJI), CCF file transmissions, ISO 20022 messaging and SMART/Search.

Return of Funds to Paying Agents Due to Default or Bankruptcy of the Issuer

If DTC has received the funding from an issuer's agent and has allocated the payment to you, and the agent, within one business day of the funding, requests a return of funds, due to default or bankruptcy of the issuer, your account will be charged back and collected funds will be returned to the paying agent no later than one business day following the request.

- You will receive one day advance notification before the adjustment is processed to your account.
- If such a request is received more than one business day after the funding date, DTC will cooperate with both the payor and you to resolve the matter by contacting the affected parties to ascertain your willingness to accept a charge for funds that may have been distributed to your customers. Funds collected from you will be promptly remitted to the paying agent. In cases where you are unwilling or unable to immediately comply with the request, DTC will provide the agent with participant names and contacts to assist in the collection process.

MATURITY PRESENTMENTS FOR MMI ISSUES

A “Maturity Presentment” is a Delivery Versus Payment (as defined in Rule 1) of matured money market instruments (MMI Securities) from the account of a presenting Participant to a designated paying agent account for that issue and is subject to, and is processed in accordance with, Rule 9(A), Rule 9(B), Rule 9(C) of DTC and the Procedures set forth in the DTC Settlement Service Guide. Maturity Presentments are not attempted for processing until the issuer’s issuing and paying agent (IPA) makes a funding decision in the form of an “MMI Funding Acknowledgment.” Once a funding decision is made items will be processed subject to risk controls and the sufficient inventory of the relevant Participants. IPAs and other Participants may submit input and inquiries relating to MMI Securities processing through the Settlement User Interface. See the DTC Settlement Service Guide, available at <http://www.dtcc.com/~media/Files/Downloads/legal/service-guides/Settlement.pdf>, for the DTC Procedures relating to the processing of transactions in MMI Securities.

ACTIVITY VERIFICATION

Activity involving called positions is recorded on the Participant Daily Activity Statement.

Check your statement to be sure your transactions were properly processed and recorded.

Any discrepancy with DTC's Daily Activity Participant Statement must be reported to DTC's Customer Help Center at 888 382 2721 as soon as possible after the statement is received.

Warning: It is the Participant's responsibility under DTC's Rules and Procedures to verify the accuracy of the Daily Activity Participant Statement.

APPENDIX A: ILLUSTRATIONS

IMPARTIAL LOTTERY METHOD FOR ALLOCATING CALLED SECURITIES

When securities are called, DTC will conduct an impartial lottery using an incremental random number technique.

- First, a "called increment" is calculated by dividing (a) the number of securities called from DTC by the Trustee or Transfer Agent, into (b) the total securities deposited with DTC. In the illustration, the call increment equals 23.72; in other words, almost every 24th security in DTC is called.
- Then each of the securities held by DTC is assigned a consecutive security number starting with one. For this purpose, each share of preferred stock is treated as one security, or, if bonds are being called, each \$1,000 bond is treated as one security. When number assignments are completed, each security held by each DTC Participant is identified by an arbitrary unique number for purposes of the lottery. In the illustration, 100 securities held in DTC by Participant "C" for example, are assigned security numbers 0052 through 0151. Security numbers 1238 through 1337 are also assigned to the same securities from a second range of numbers as explained in the last paragraph of step #4(*).
- Next, a random number is found within the first range of numbers just assigned to the securities held by DTC. This random number is the starting place for allocating the called securities among DTC Participants. The random number will be generated by taking the square root of the lottery date times the lottery day and truncating the decimal portion of the answer until it is within the first range of assigned security numbers. In the illustration, random number 0396 is found within the first range of numbers which extends from 001 to 1186.
- Finally, allocation of the called securities is made. The call increment is added to the starting random number. The answer is the number of the first security called. In the illustration, 23.72 is added to 0396 and the answer (0419.72) rounded off (0420) is the number of the first security called. Then, the call increment is added to the first answer to find the number of the second security called (041.72 + 23.72 = 0443.44, or security number 0443). The process is continued until the called portion (50) of the securities deposited with DTC (1,186) is fully allocated among DTC Participants. In the illustration, of the 100 securities held in DTC by Participant "C", for example, 4 securities are called.

* Because the starting random number is selected within the first range of assigned security numbers, the incremental process usually produces answers that go beyond the last number in the first range. Therefore, a second range of numbers is provided as noted earlier. In the illustration, 17 of the 50 securities called were allocated in the second range of assigned security numbers which extends from 1187 to 2372.

ILLUSTRATION

Assume that there are 1,186 securities XYZ held in DTC by 10 members, that 50 securities are called from DTC by the Trustee or Transfer Agent, and that DTC's lottery is run on May 30, 1973.

- CALL INCREMENT = $\frac{\text{TOTAL SECURITIES CALLED}}{\text{SECURITIES HELD IN DTC}} = \frac{50}{1186} = 23.72$ (CARRIED TO TWO DECIMAL PLACES, NO ROUNDING).
- ASSIGN SECURITY NUMBERS TO EACH SECURITY:

DTC PARTICIPANT	NO. OF SECURITIES HELD IN DTC	ASSIGNED SECURITY NUMBERS	
		1st RANGE	2nd RANGE
A	1	001	1187
B	50	0002-0051	1188-1237
C	100	0052-0151	1238-1337
D	2	0152-0153	1338-1339
E	1	0154	1340
F	1	0155	1341
G	1,000	0156-1186	1342-2341
H	1	1187	2342
I	10	1187-1186	2343-2352
J	20	1167-1186	2353-2372
TOTAL IN DTC		1,186	

- FIND A STARTING RANDOM NUMBER BETWEEN 001 AND 1186. LOTTERY DATE IS MAY 30, 1973 (05/30/73).
 $\text{RANDOM NUMBER} = \sqrt{\text{LOTTERY DATE} \times \text{LOTTERY DAY}}$
 $= \sqrt{053073 \times 30}$
 $= 1261.82011396$ (CARRIED TO EIGHT DECIMAL PLACES, NO ROUNDING.)
 $= 82011396$ (DECIMAL PORTION)
 $= 396$ (DECIMAL PORTION TRUNCATED FROM LEFT TO RIGHT UNTIL WITHIN THE FIRST RANGE OF ASSIGNED SECURITY NUMBERS 0001 TO 1186)
- ALLOCATE THE 50 SECURITIES CALLED (SEE ALLOCATION TABLE ON NEXT PAGE). START THE ALLOCATION PROCESS AT ASSIGNED SECURITY NUMBER 0396.

SUMMARY OF ALLOCATION:

DTC PARTICIPANT	NO. OF SECURITIES HELD IN DTC	ALLOCATION OF SECURITIES CALLED
A	1	0
B	50	2
C	100	4
D	2	0
E	1	0
F	1	0
G	1,000	43
H	1	0
I	10	0
J	20	1
TOTAL IN DTC		50

TOTAL CALLED 50

Figure 1: Lottery Methodology for a Partial Call

ALLOCATION TABLE							
<u>RANDOM NUMBER</u>	<u>ROUNDED RANDOM NUMBER*</u>	<u>DTC PARTICIPANT</u>	<u>NO. OF SECURITIES ALLOCATED</u>	<u>RANDOM NUMBER</u>	<u>ROUNDED RANDOM NUMBER*</u>	<u>DTC PARTICIPANT</u>	<u>NO. OF SECURITIES ALLOCATED</u>
0396.00	Start			1012.72			
+ 23.72	Increment			+ 23.72			
0419.72	0420	G	1	1036.44	1036	G	1
+ 23.72				+ 23.72			
0443.44	0443	G	1	1060.16	1060	G	1
+ 23.72				+ 23.72			
0467.16	0467	G	1	1083.88	1084	G	1
+ 23.72				+ 23.72			
0490.88	0491	G	1	1107.60	1108	G	1
+ 23.72				+ 23.72			
0514.60	0515	G	1	1131.32	1131	G	1
+ 23.72				+ 23.72			
0538.32	0538	G	1	1155.04	1155	G	1 32
+ 23.72				+ 23.72			
0562.04	0562	G	1	1178.76	1179	J	1 1
+ 23.72				+ 23.72			
0585.76	0586	G	1	1202.48	1202	B	1
+ 23.72				+ 23.72			
0609.48	0609	G	1	1226.20	1226	B	1 2
+ 23.72				+ 23.72			
0633.20	0633	G	1	1249.92	1250	C	1
+ 23.72				+ 23.72			
0656.92	0657	G	1	1273.64	1274	C	1
+ 23.72				+ 23.72			
0680.64	0681	G	1	1297.36	1297	C	1
+ 23.72				+ 23.72			
0704.36	0704	G	1	1321.08	1321	C	1 4
+ 23.72				+ 23.72			
0728.08	0728	G	1	1344.80	1345	G	1
+ 23.72				+ 23.72			
0751.80	0752	G	1	1368.52	1369	G	1
+ 23.72				+ 23.72			
0775.52	0776	G	1	1392.24	1394	G	1
+ 23.72				+ 23.72			
0799.24	0799	G	1	1415.96	1416	G	1
+ 23.72				+ 23.72			
0822.96	0823	G	1	1439.69	1440	G	1
+ 23.72				+ 23.72			
0846.68	0847	G	1	1463.40	1463	G	1
+ 23.72				+ 23.72			
0870.40	0870	G	1	1487.12	1487	G	1
+ 23.72				+ 23.72			
0894.12	0894	G	1	1510.84	1511	G	1
+ 23.72				+ 23.72			
0917.84	0918	G	1	1534.56	1535	G	1
+ 23.72				+ 23.72			
0941.56	0942	G	1	1558.28	1558	G	1
+ 23.72				+ 23.72			
0965.28	0965	G	1	1582.00	1582	G	1 11
+ 23.72							
0989.00	0989	G	1				
+ 23.72							
1012.72	1013	G	1				

* Rounded to nearer integer.

Figure 2: Allocation Table for a Partial Call

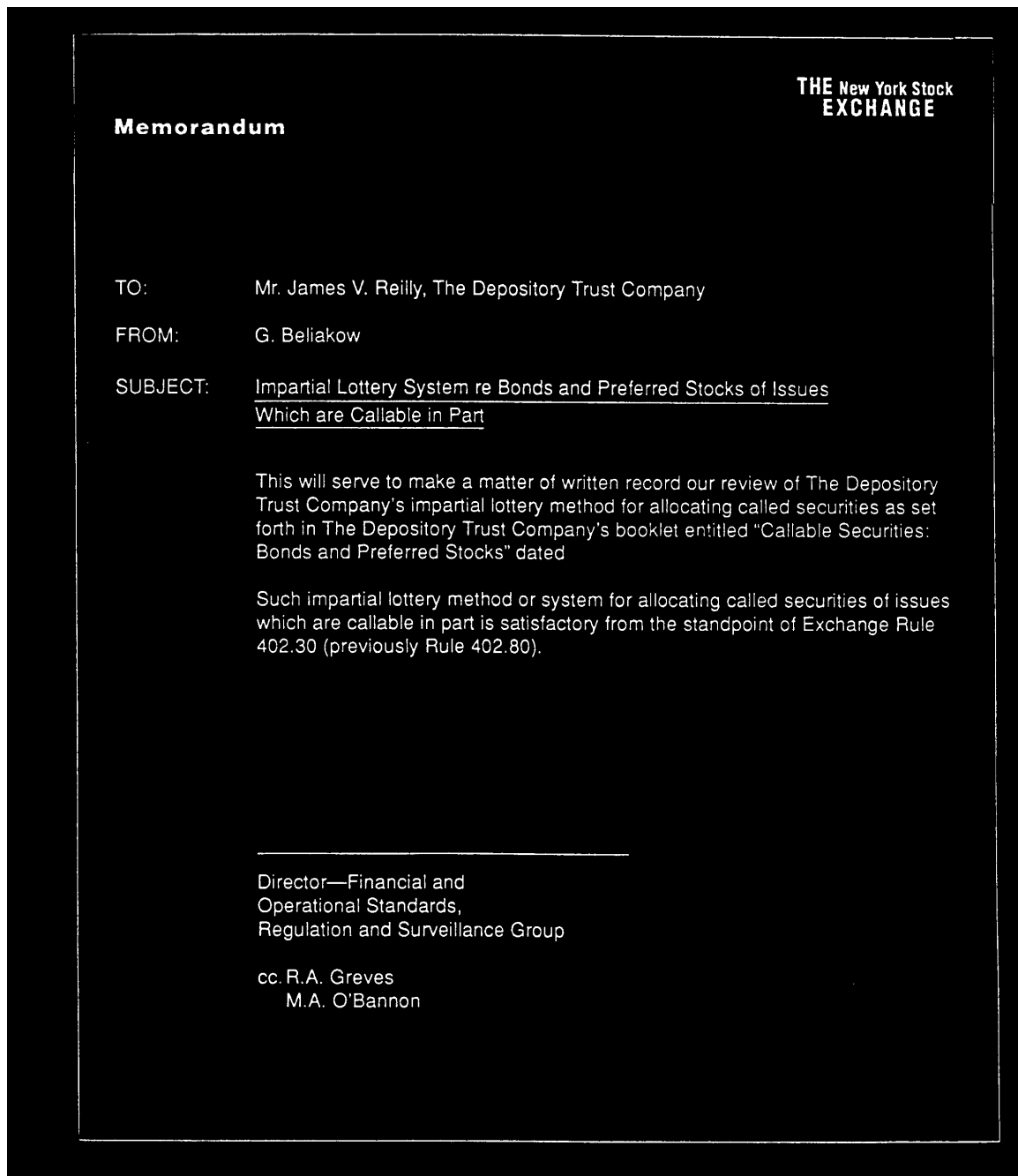


Figure 3: Opinion - Partial Call Lottery Method, part 1

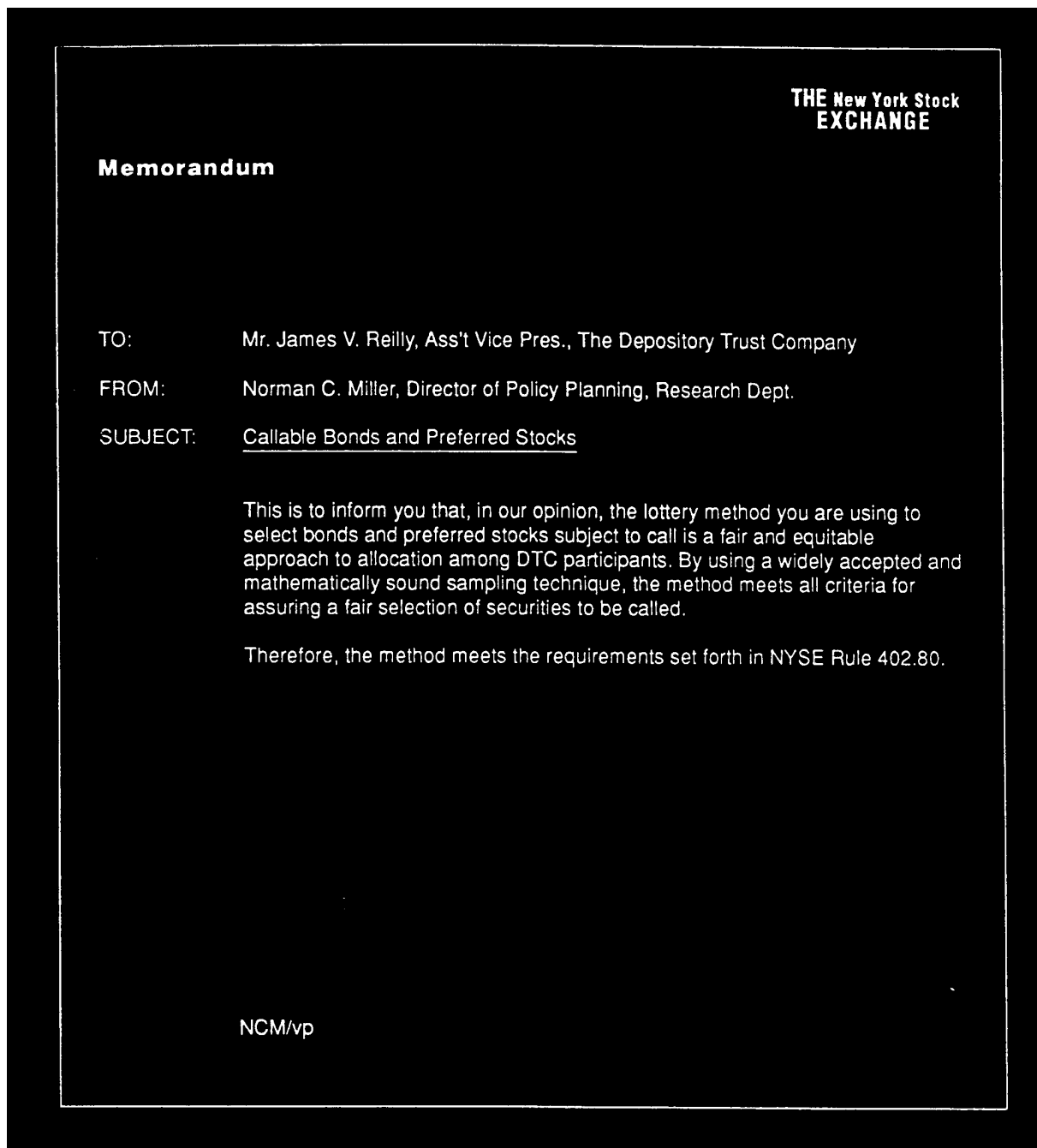


Figure 4: Opinion - Partial Call Lottery Method, part 2